p1106: Solve by factoring (v19)

1. Solve the equation
$$x^2 - 5x + 6 = 0$$

$$(x - 3)(x - 2) = 0$$
$$x = 2$$
$$x = 3$$

2. Solve the equation
$$x^2 + 2x - 24 = 0$$

$$(x + 6)(x - 4) = 0$$
$$x = 4$$
$$x = -6$$

3. Solve the equation
$$2x^2 + 8x - 7 = x^2 + 6x + 8$$

$$x^2 + 2x - 15 = 0$$
$$(x + 5)(x - 3) = 0$$
$$x = 3$$
$$x = -5$$

4. Solve the equation
$$3x^2 - 7x + 10 = 2x^2 - 3x + 7$$

$$x^2 - 4x + 3 = 0$$
$$(x - 3)(x - 1) = 0$$
$$x = 1$$
$$x = 3$$

5. Solve the equation
$$3x^2 + 11x + 13 = 2x^2 + 3x - 3$$

$$x^2 + 8x + 16 = 0$$
$$(x + 4)(x + 4) = 0$$
$$x = -4$$
$$x = -4$$

6. Solve the equation
$$7x^2 - 27x + 18 = 0$$

$$(7x - 6)(x - 3) = 0$$
$$x = 3$$
$$x = \frac{6}{7}$$

7. Solve the equation
$$2x^2 - 27x + 81 = 0$$

$$(2x - 9)(x - 9) = 0$$
$$x = 9$$
$$x = \frac{9}{2}$$

8. Solve the equation
$$17x^2 + 78x + 42 = 6x^2 + 4x - 6$$

$$11x^2 + 74x + 48 = 0$$
$$(11x + 8)(x + 6) = 0$$
$$x = -6$$
$$x = \frac{-8}{11}$$

9. Solve the equation
$$12x^2 + 35x - 10 = x^2 - 5x + 6$$

$$11x^2 + 40x - 16 = 0$$
$$(11x - 4)(x + 4) = 0$$
$$x = -4$$
$$x = \frac{4}{11}$$

10. Solve the equation
$$8x^2 - 67x + 62 = x^2 + 2x + 8$$

$$7x^2 - 69x + 54 = 0$$
$$(7x - 6)(x - 9) = 0$$
$$x = 9$$
$$x = \frac{6}{7}$$